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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/158,549	09/22/1998	JOHN S. HENDRICKS	5515	4086

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EXAMINER

BROWN, RUEBEN M

ART UNIT PAPER NUMBER

2611

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/158,549

Applicant(s)

HENDRICKS, ET AL

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,16-21 and 41-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,16-21 and 41-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

On page 9 of applicant's response, it is argued that the system memory 65 of Florin does not read on the claimed 'memory for storing interactive programming instructions that enable a subscriber to engage in online textual interactivity'. Since examiner is relying upon Hedger to teach 'textual interactivity' with online applications, it is true that by itself Florin does not meet the requirement. However, Florin clearly teaches that the memory 65 includes both volatile & non-volatile memory components, which are used to store an operating system and playback software, fonts, sounds and the like in the present invention; see col. 10, lines 5-35.

Florin teaches a memory that provides the full range of capabilities of the subscriber terminal, but just does not mention, 'textual interactivity'. Hedger, which is directed to a computerized subscriber terminal; see Fig. 1, necessarily stores instructions for operating the 2650 microprocessor. Therefore, the combination of Florin and Hedger meets the claimed limitations.

The amendments to the Specification have been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 16-21 & 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florin, (U.S. Pat # 5,621,456), in view of Handelman, (U.S. Pat # 5,715,315) & Lett, (U.S. Pat # 5,657,414), and further in view of Hedger, (Broadcast Telesoftware: Experience ORACLE).

Considering claim 1, regarding the claimed hardware upgrade for enhancing the functionality of a set top box STB in a TV delivery system, such that each STB is adapted to receive electronic mail, Florin discloses an interactive CATV system that enables a subscriber to transmit/receive e-mail services at an audio-visual transceiver 54, i.e. STB, see Florin col. 22, lines 20-30. Moreover, the audio-visual transceiver 54 includes a CPU 63, which reads on the claimed microprocessor; see Fig. 2.

As for the hardware upgrade comprising an interface for providing an electrical connection to the (STB), whereby the e-mail is transferred from the STB for processing and the processed e-mail is passed to the STB for display, Florin does not discuss any details of the hardware for processing of the e-mail services.

However, the disclosure of Handelman teaches that e-mail data may be transmitted from the CATV interface unit 18 to an external memory unit 38, (Fig. 2; col. 6, lines 24-26). E-mail data then may be retrieved from external memory unit 38 passed through the STB and displayed on the TV receiver, col. 6, lines 38-45. It would have been obvious for one ordinary skill in the art at the time the invention was made to modify Florin with the teachings of Handelman, at least for the desirable advantage of making more memory available through the external memory unit.

As for the claimed at least one microprocessor connected to the memory and connected to the interface for accessing the stored interactive programming and for processing the e-mail to produce processed e-mail based on the stored interactive programming, Handelman does not show that the memory card includes a CPU. Nevertheless, Lett discloses a subscriber terminal 40 that includes an expansion card 138 that extends the capability of the subscriber terminal 40 by operating various additional processes, col. 8, lines 54-63. Lett goes on to teach that these expansion cards 138 include a microprocessor, which reads on the claimed subject matter, also see col. 8, lines 55-63.

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Florin with the feature of placing a microprocessor and programming software on a plug-in card, at least for the desirable advantage of more independent modular systems, as taught by Lett, col. 8, lines 61-63.

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Regarding the newly added feature of the 'microprocessor of the hardware upgrade being capable of communication with the microprocessor of the set top converter', Lett teaches that the microprocessor 128 and secure microprocessor 136 of the subscriber terminal 40 communicates with the expansion card 138, which includes its own microprocessor and/or memory, via memory bus 141 and secure memory bus 143, respectively; see col. 8, lines 11-63.

As for the additionally amended claimed feature of textual interactivity with the on-line applications, Florin only discusses a numeric keypad, remote control 60, see col. 11, lines 41-67. Nevertheless, Hedger discloses the benefits of using a textual keyboard, instead of a numeric keypad; see page 422, section 4.1 and page 425, section 4.6. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Florin & Handelman, to use a textual keyboard for the desirable improvement of not inhibiting certain user responses that are textual in nature, as taught by Hedger.

The claimed memory for storing interactive programming instructions reads on the combination of Florin, col. 8, lines 52-55, Handelman and Hedger (Fig. 1) which are directed to a CATV system that enables subscribers interactivity, Florin (col. 1, lines 25-30; col. 5, lines 40-45 & col. 9, lines 15-25). Moreover, Handelman discloses that the processor 34 controls the operation of the STB/CATV interface unit 18; see col. 6, lines 34-36.

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Considering claims 2 & 17, Handelman discloses that video data may be transmitted to the CATV unit 18 in MPEG format, which reads on digital video; see col. 6, lines 15-21. Also Florin discusses the use of digital video at col. 9, lines 35-40.

Considering claims 3 & 18, since the two known methods for data transmission are serial or parallel, Handelman necessarily utilizes either technique to transmit the data between the CATV unit 18 and external memory unit 38.

Considering claims 4 & 19, the instant claim calls for subscriber input, including textual information that is used to produce the processed e-mail for display. Florin & Handelman discuss that a remote control is used to select an information display channel or non-CATV data display option. Handelman also teaches that the STB may be connected to a keyboard, thereby enabling the input of textual information. Moreover, as discussed in claim 1, Hedger teaches textual input is advantageous over numeric input styles, for certain applications.

Considering claims 5, 20 & 42, Florin (col. 11, lines 29-40; col. 23, lines 60-66; col. 24, lines 11-65) & Handelman (col. 1, lines 61-67) disclose interfacing with on-line databases, interactive services and message services and using a telephone modem. Thus the two-way communication reads on the user communicating with an intermediate CATV headend or more central facility.

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Considering claims 6 & 21, the claimed memory for storing the processed e-mail is met by the external memory unit 38 or internal memory unit 36 of Handelman; see Fig. 2, whereas Florin discusses the well-known utilization of a CPU 63 for controlling the set top box, also see Lett, col. 8, lines 45-65, which teaches that the expansion card 138 includes memory.

Considering claim 16, the claimed method for enhancing the functionality of a STB comprises steps that correspond with subject matter mentioned above in the rejection of claim 1, and is likewise treated.

Considering claim 41, the claimed elements of a hardware upgrade card for enhancing the functionality of a set top converter, corresponds with subject matter mentioned above in the rejection of claim 1, and is likewise treated. As for the additionally claimed feature of the hardware upgrade card being removably connected to the set top converter, Lett discloses that the expansion card is a printed circuit board, and therefore necessarily provides the claimed removability.

Considering claim 43, even though the combination of Florin, Handelman & Hedger reads on textual interactivity, the above cited references do not discuss the use of an overlay menu. Examiner takes Official Notice that at the time the invention was made, the use of overlay technology for EPG applications was well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Florin with an overlay or superimposed menu, at least for known benefit of allowing the user to watch the current TV program while simultaneously interacting with the menu.



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Considering claim 44, Lett teaches that the expansion card 138 extends the capability of the subscriber terminal 40, but does not explicitly state the expansion card my coordinate reception of TV programs and interact with the upstream data transmitter. Nevertheless, one of ordinary skill in the art at the time the invention was made, would have readily recognized the benefit of placing some of the tuning and upstream functionality on an expansion card. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Florin and Lett to provide additional features such as tuning to the expansion card, at least for the desirable improvement of enabling multiple channels to be tuned concurrently and/or providing redundancy of tuning and upstream hardware.

### *Conclusion*

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

**Or:**

(571) 273-7290 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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